

Figure 1 illustrates a medical device 100 designed for monitoring blood flow. The system comprises a main control unit 110, which includes a display screen 158 and a set of controls 160. This unit is connected via tubing 126 and 124 to a reservoir or pump component 114. A long, flexible tube 104 extends from the reservoir to a patient's arm 106. At the distal end of this tube, near the hand, is a sensor or catheter 120. At the proximal end, near the shoulder, is another sensor or catheter 128. Arrows indicate the direction of fluid flow between these two points along the tube. The entire setup is supported by a stand 102.

Figure 2

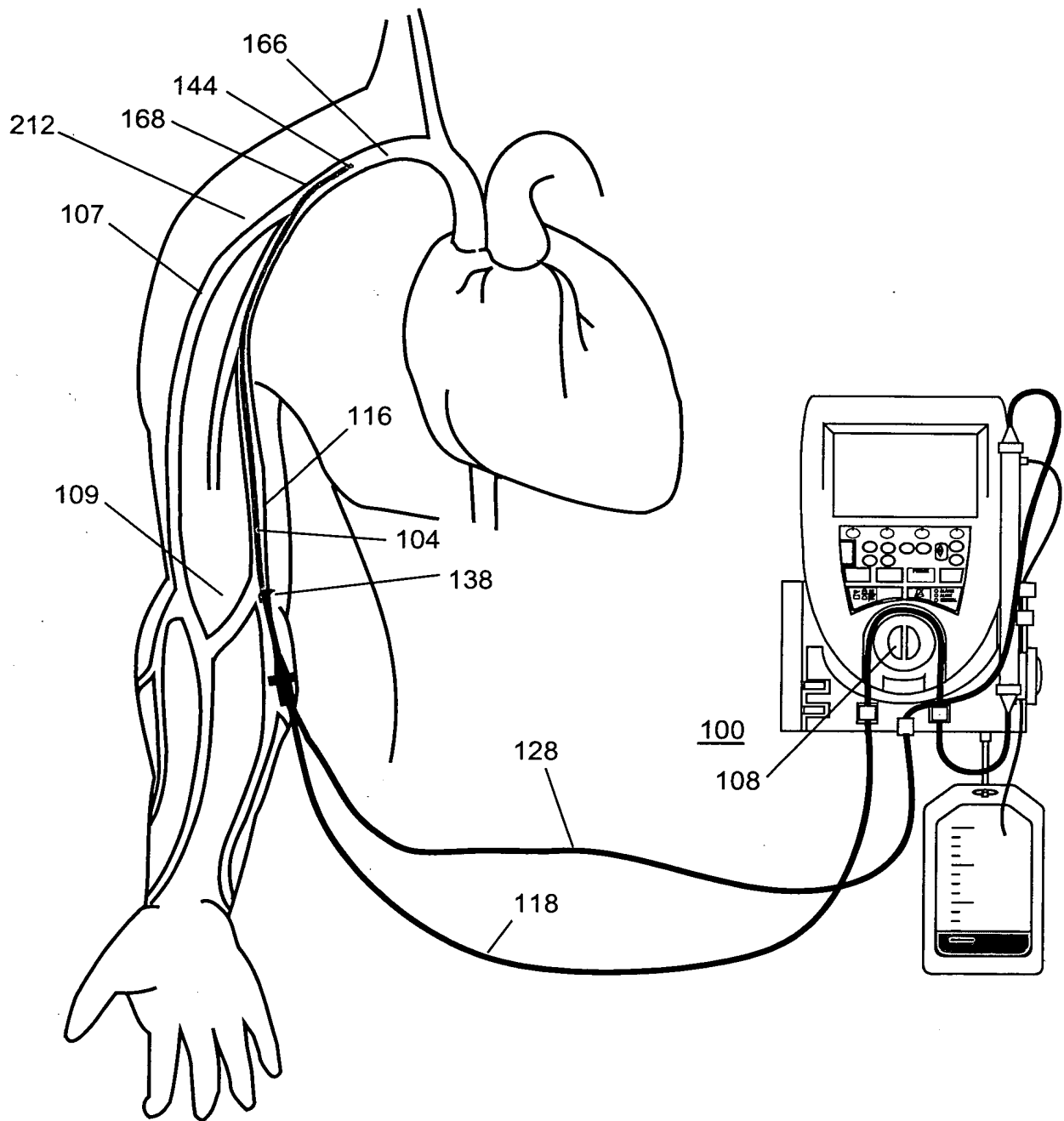


Figure 3

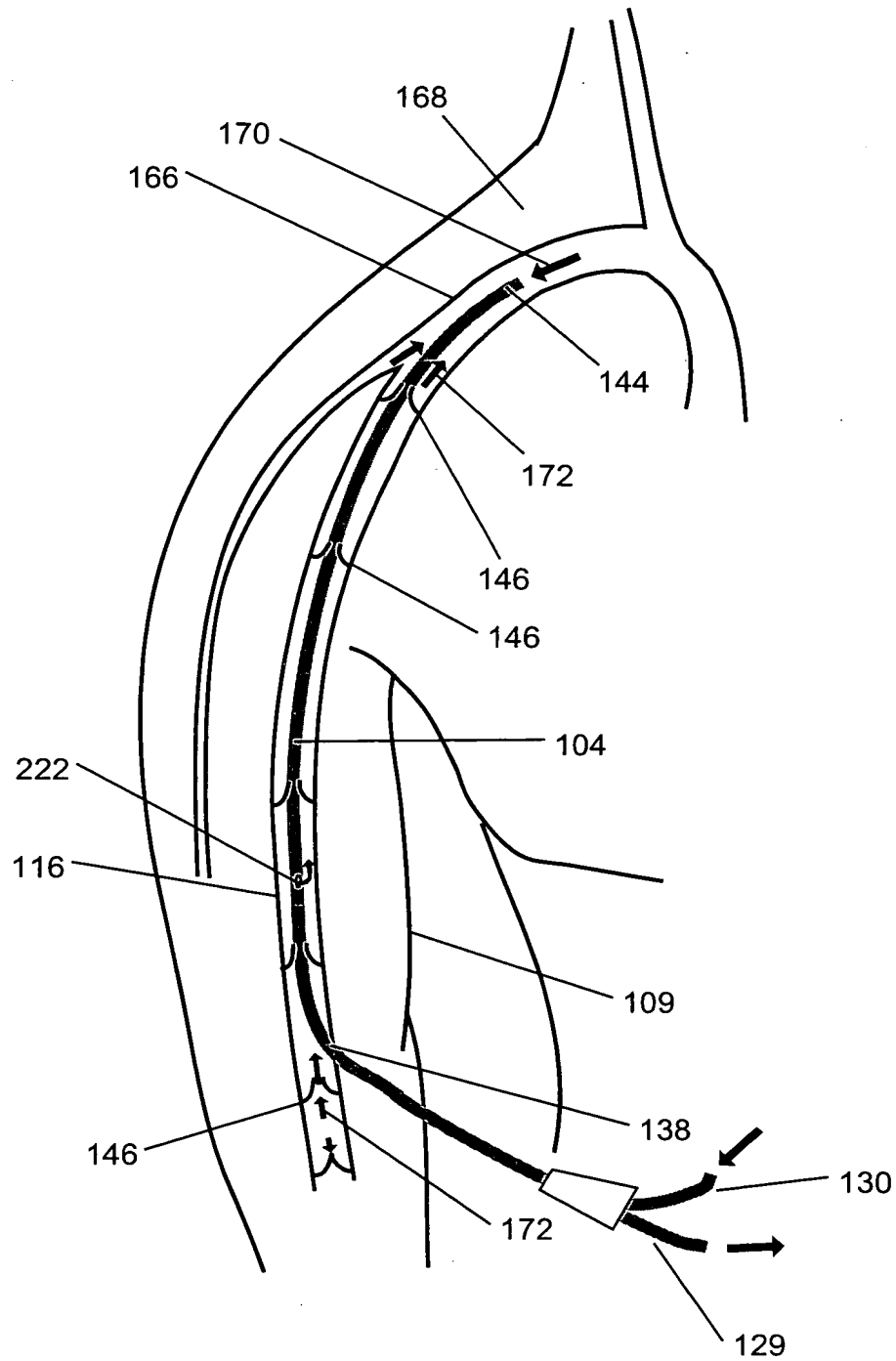
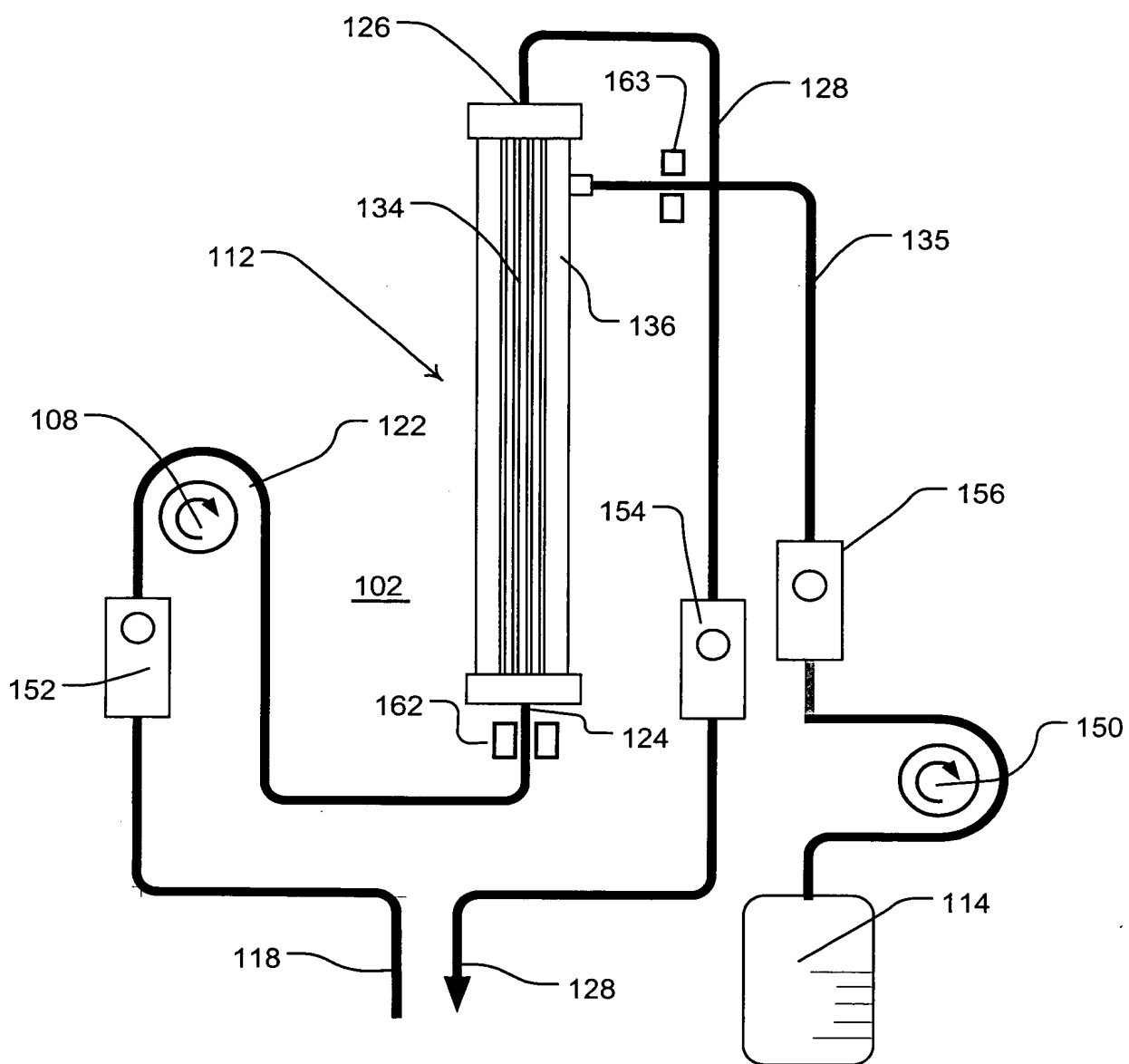
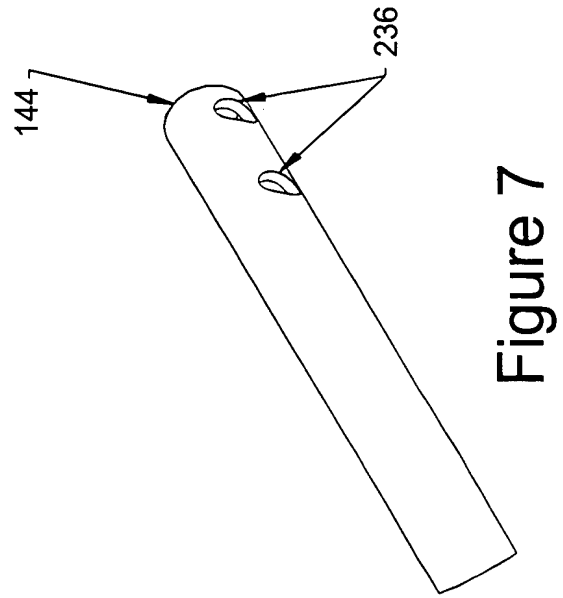
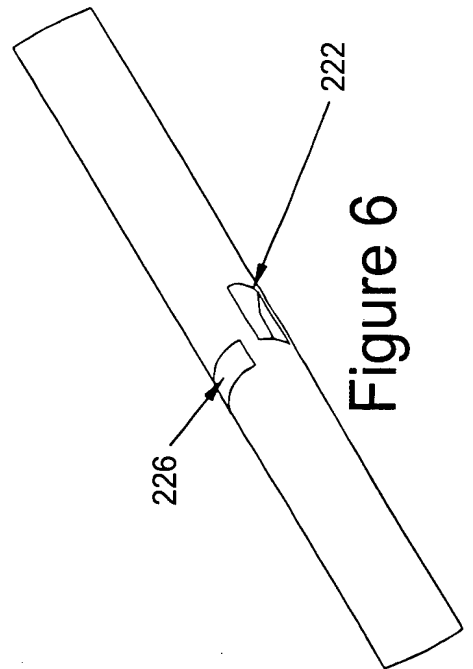
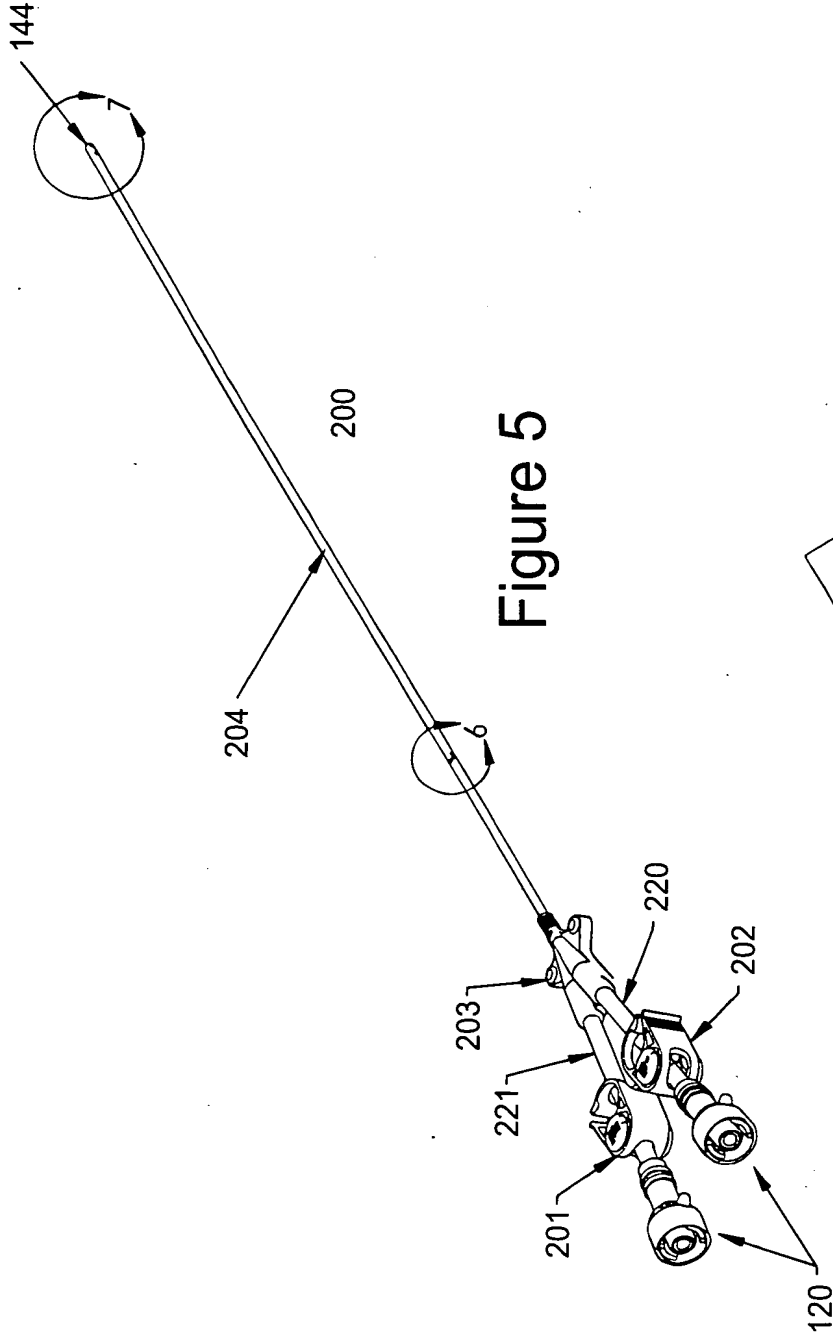


Figure 4





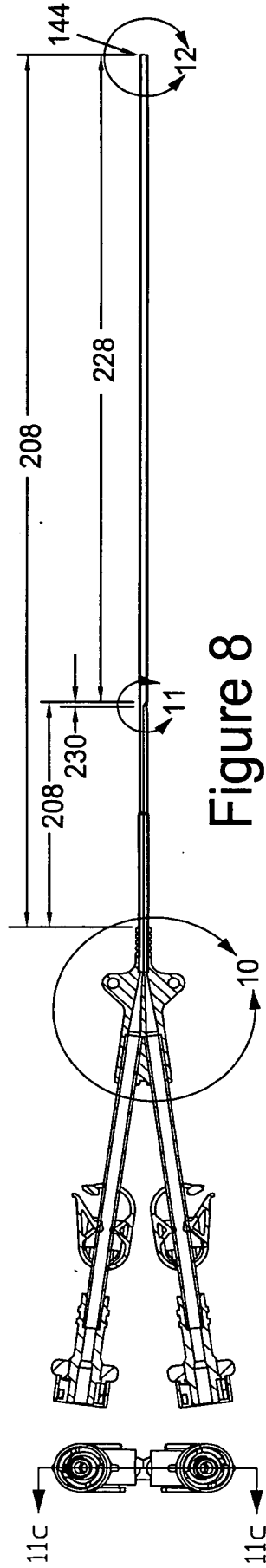


Figure 8

Figure 9

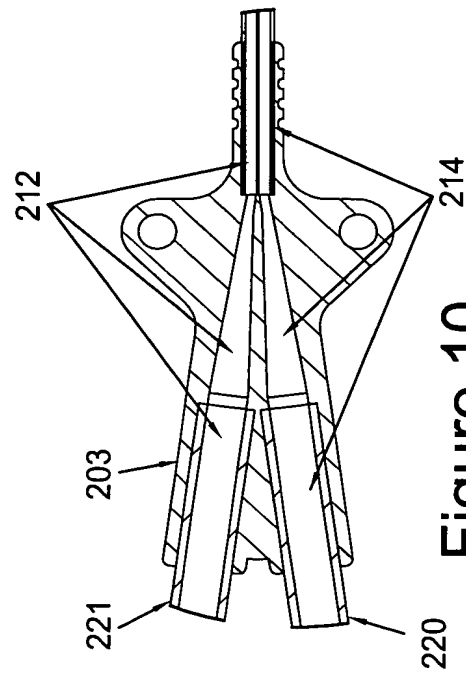


Figure 10

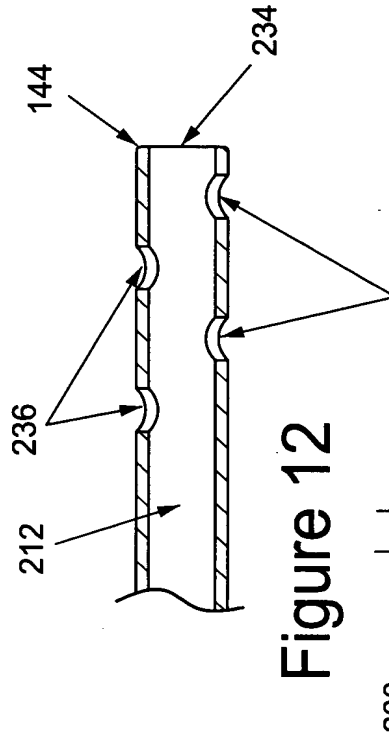
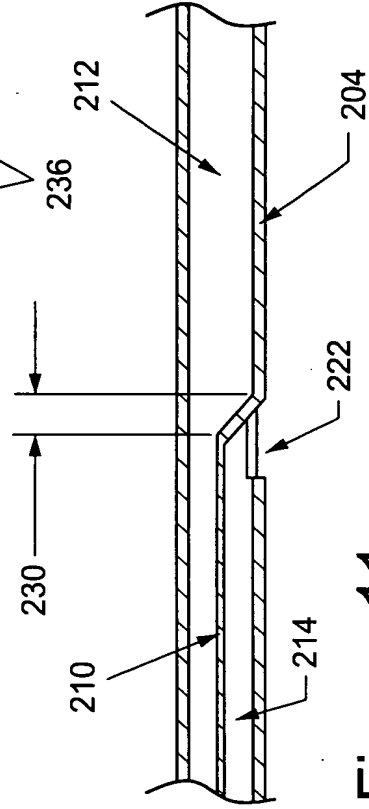
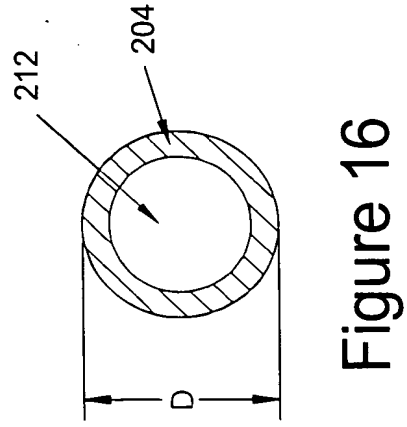
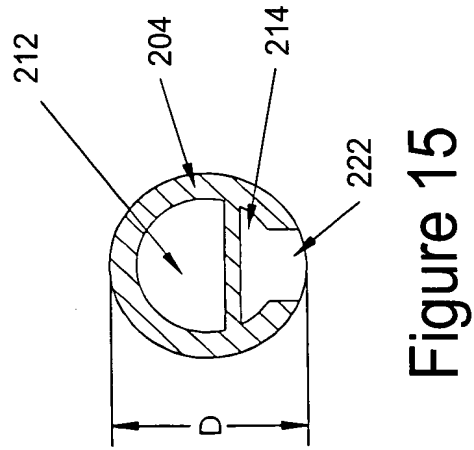
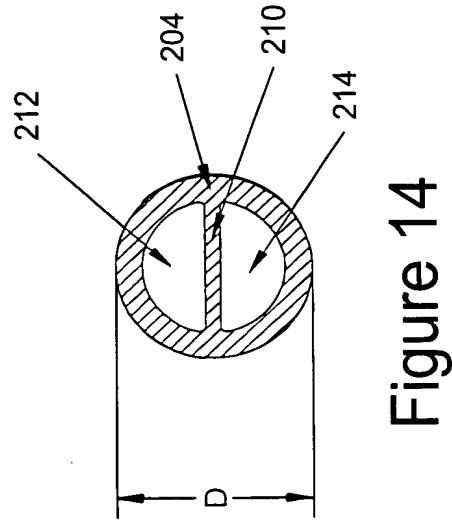
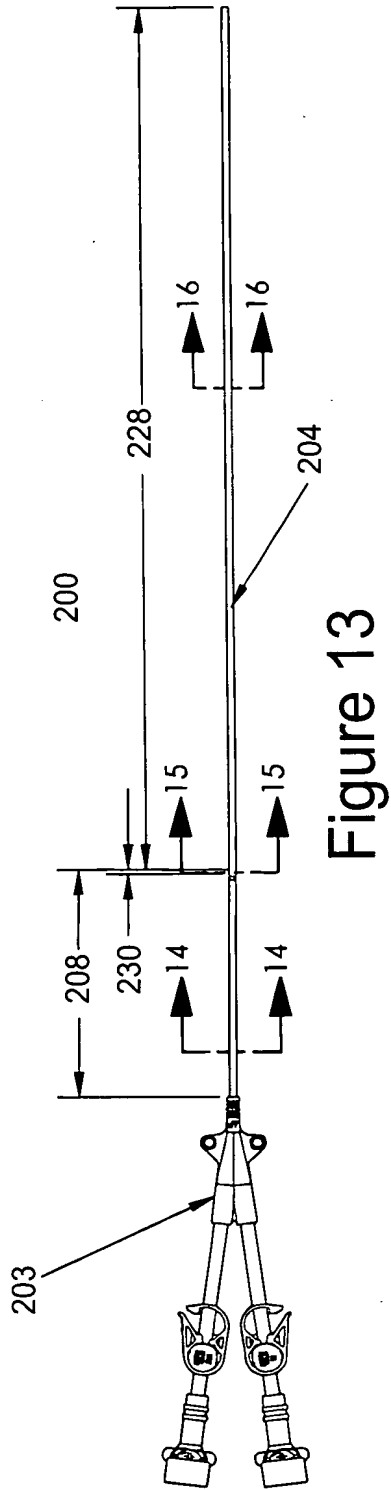


Figure 11

Figure 12





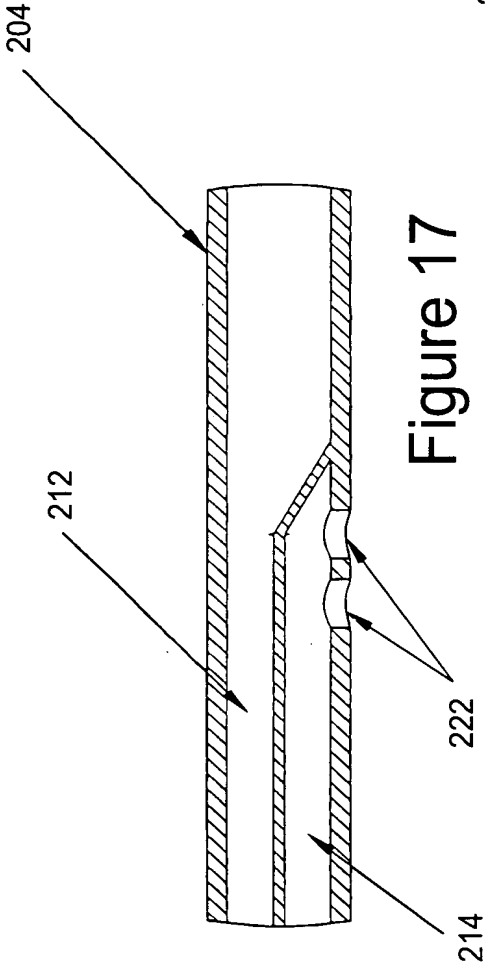


Figure 17

Figure 19

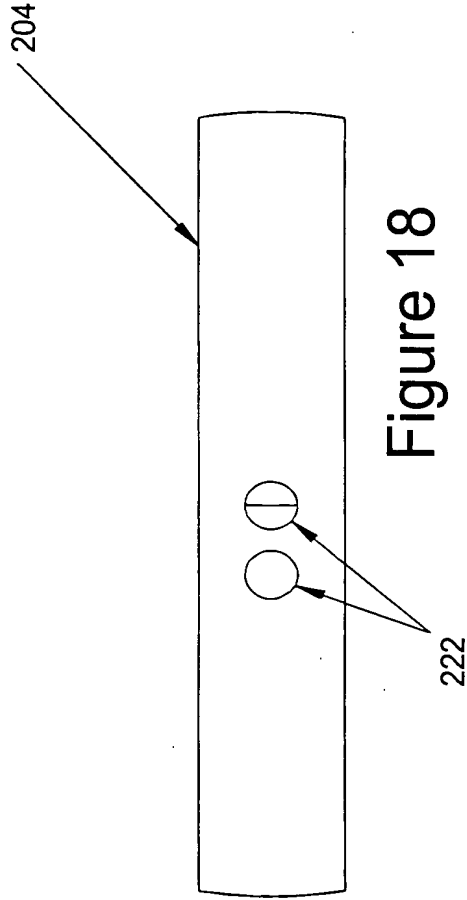
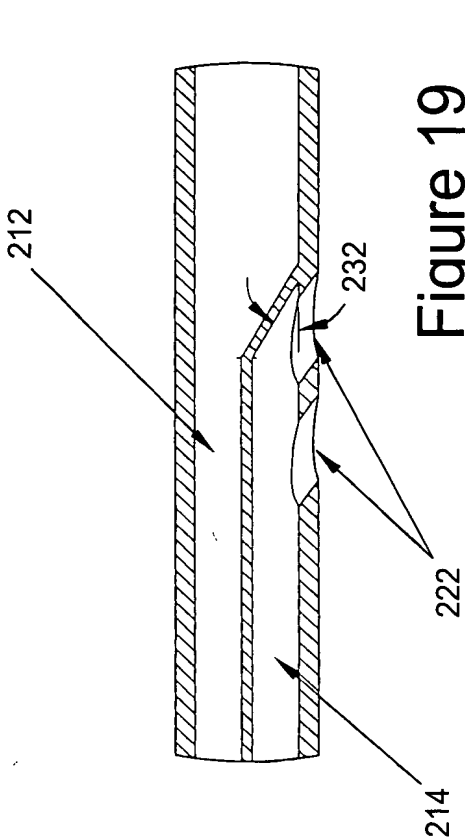


Figure 18

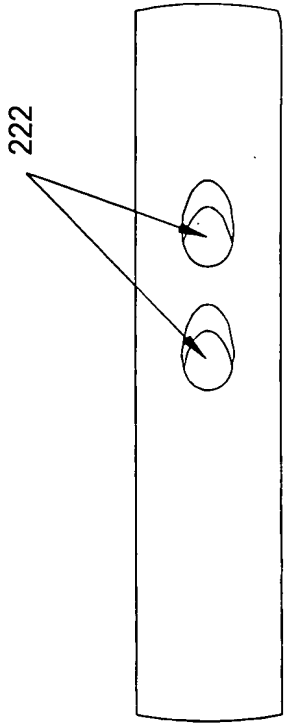


Figure 20

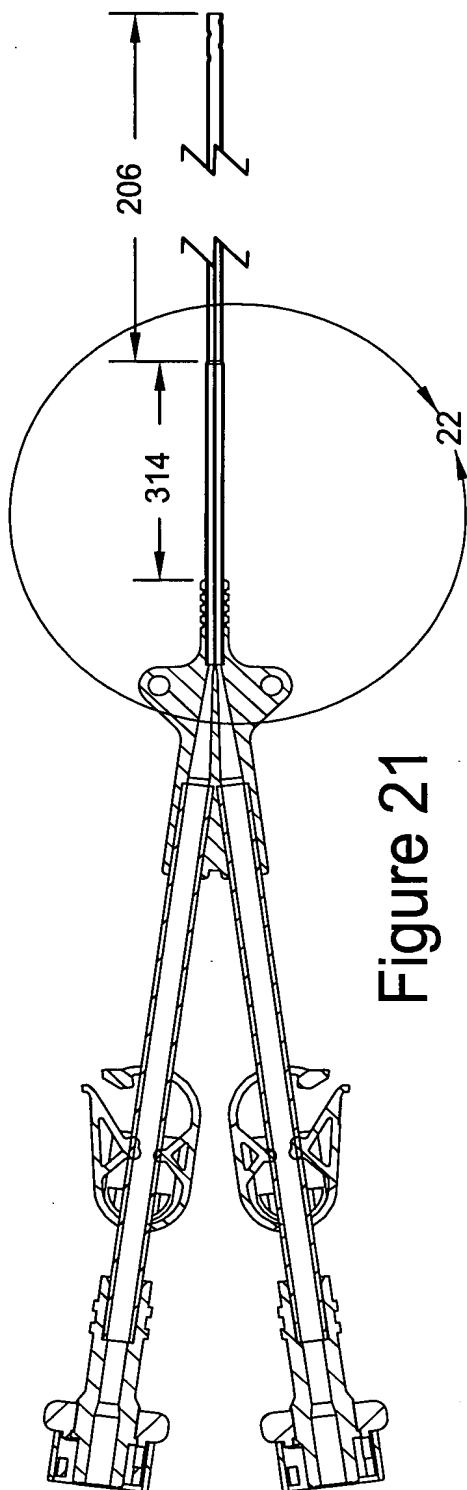


Figure 21

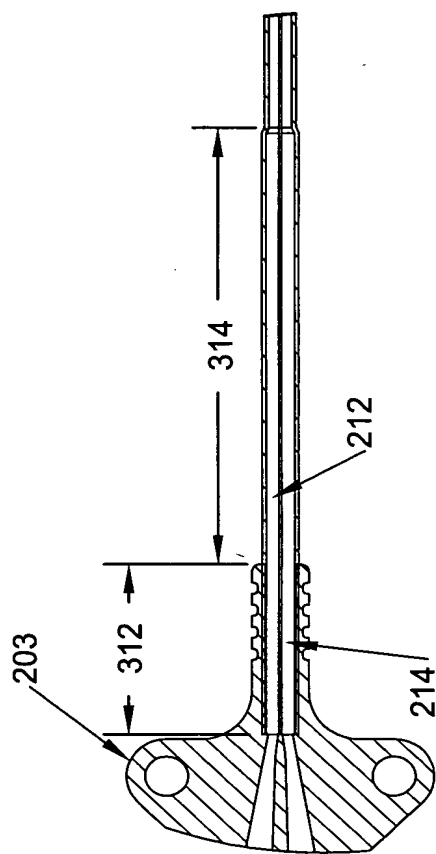
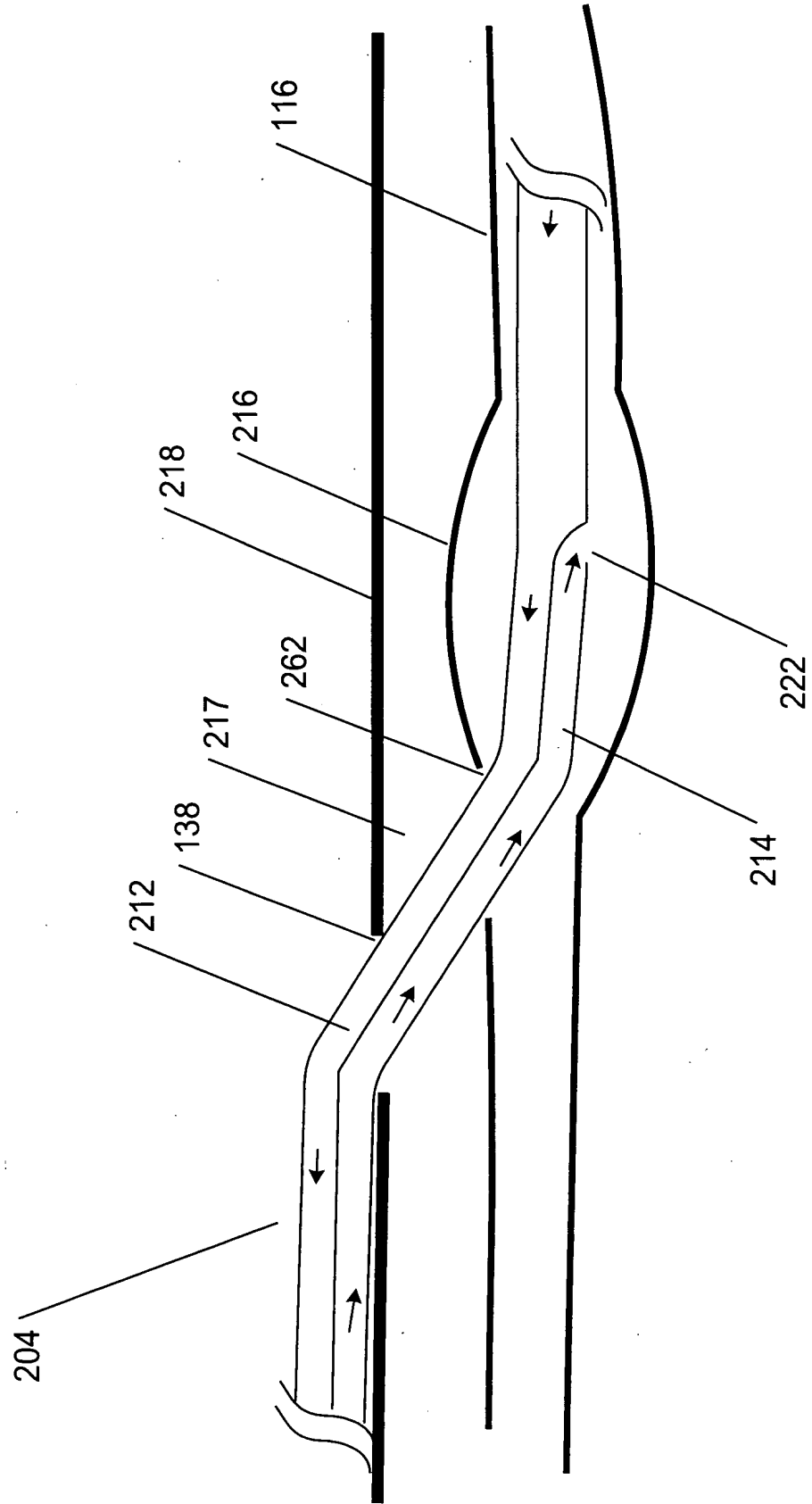


Figure 22

Figure 23



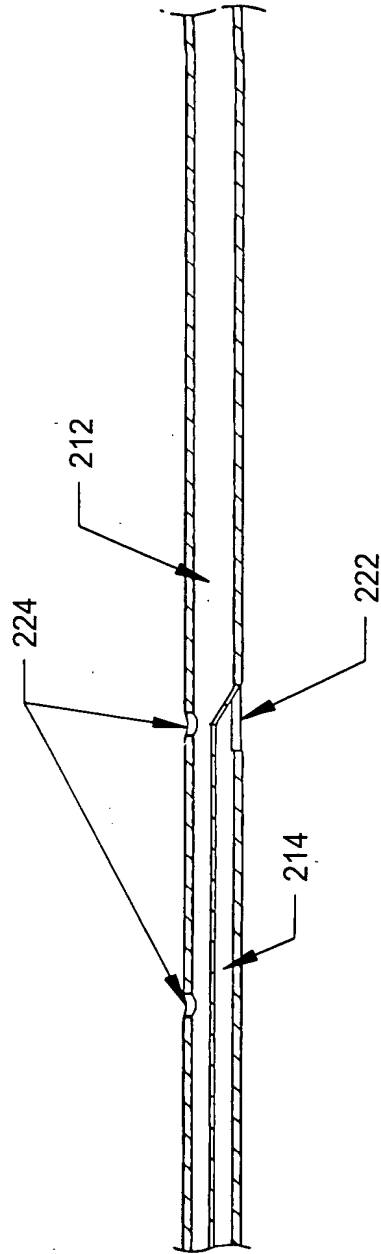


Figure 24

Figure 25

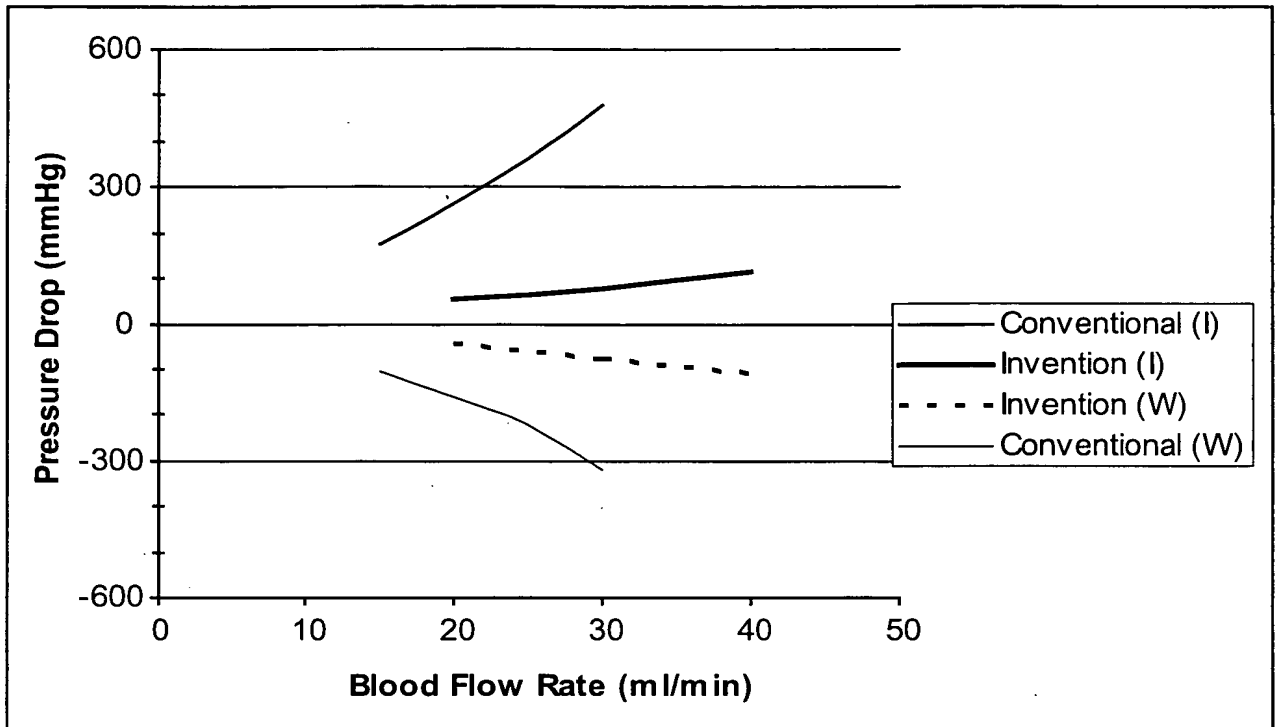


Figure 26

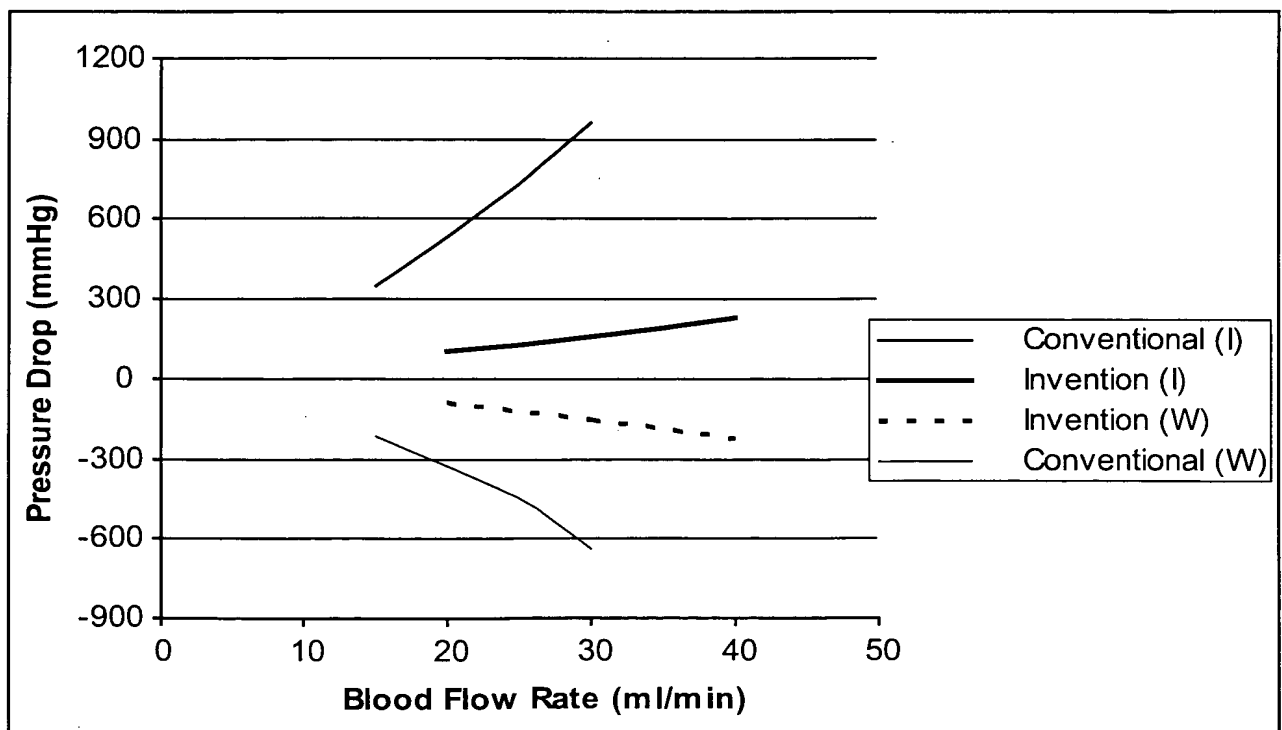


Figure 27

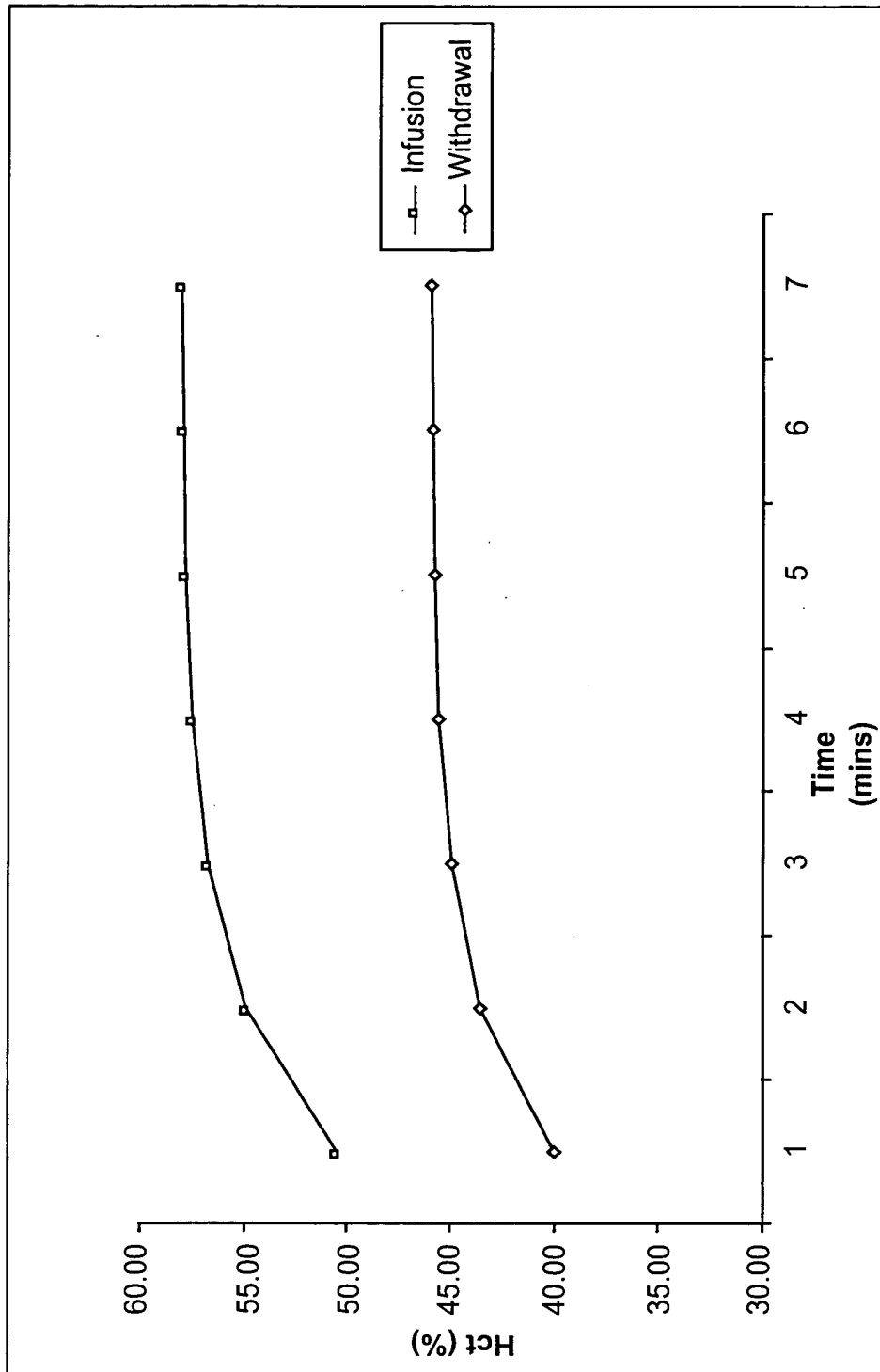


Figure 28

At Qb=40ml/m, Quf=100 ml/hr	
Recirculation %	% Hct Increase
5	0.1
10	0.5
20	1.1
30	1.9
40	3

Figure 29

At Qb=40ml/m, Quf=500 ml/hr	
Recirculation %	% Hct Increase
5	1
10	3
20	7
30	13
40	21

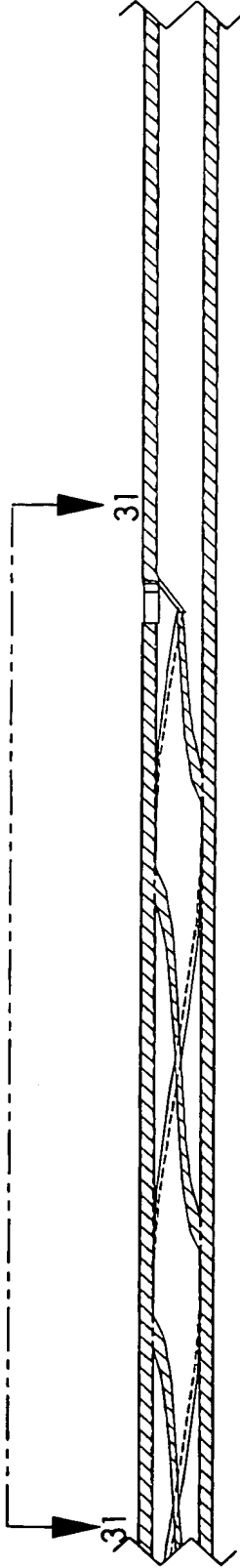


Figure 30

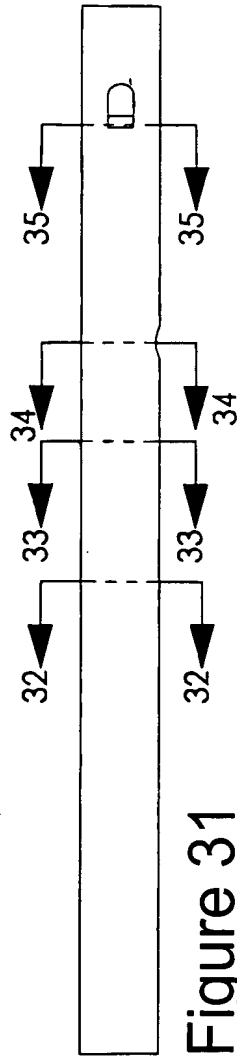


Figure 31

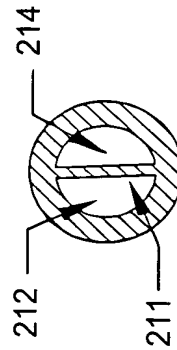


Figure 32

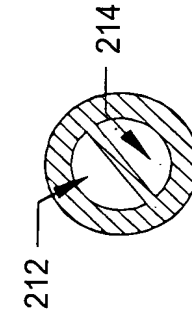


Figure 33

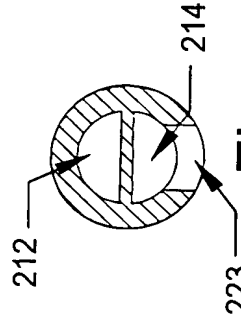


Figure 34

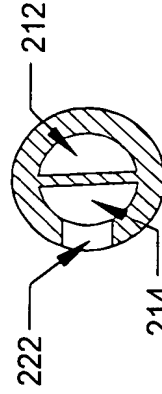


Figure 35

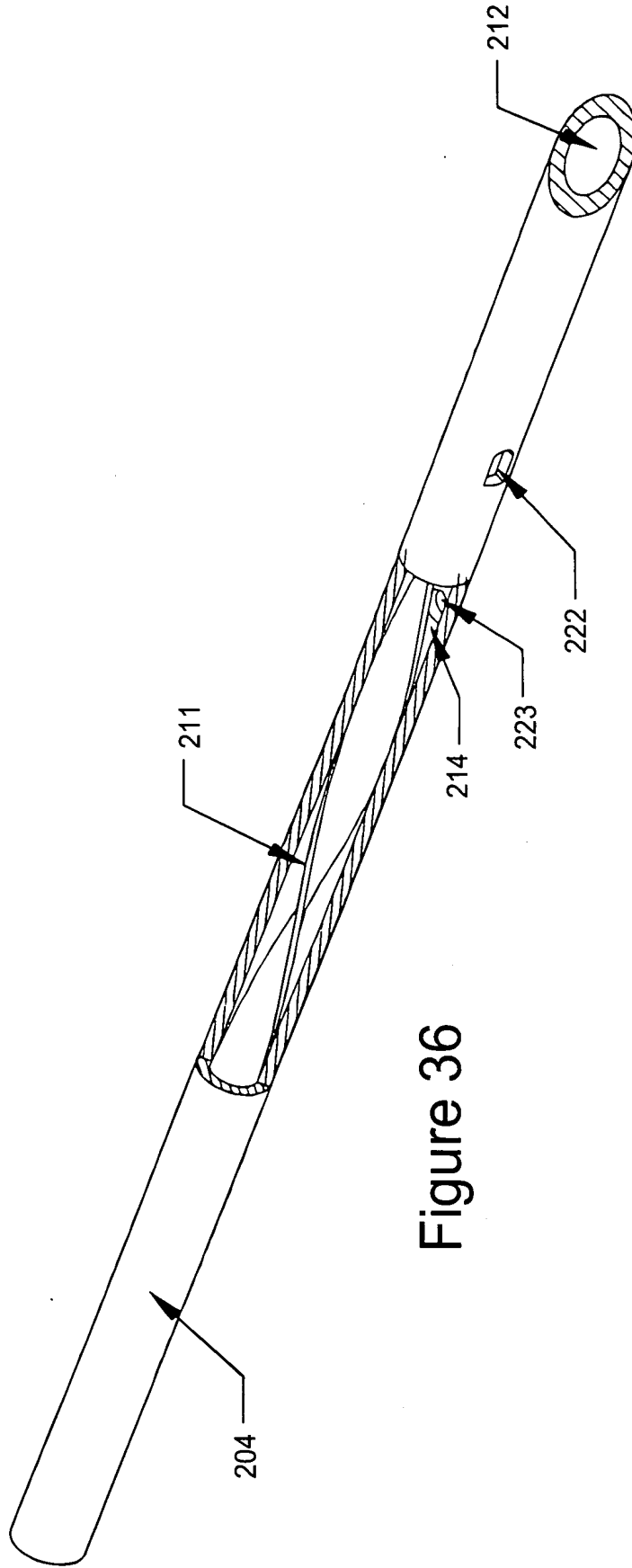


Figure 36

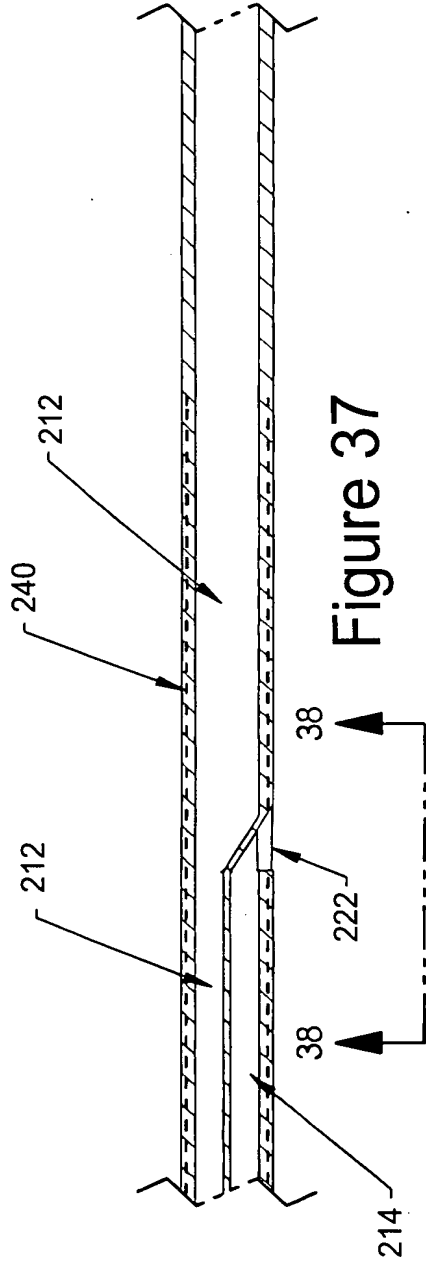


Figure 37

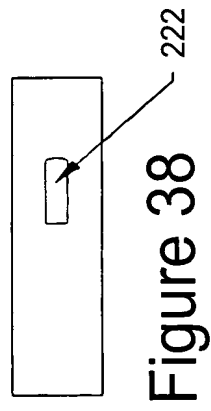


Figure 38

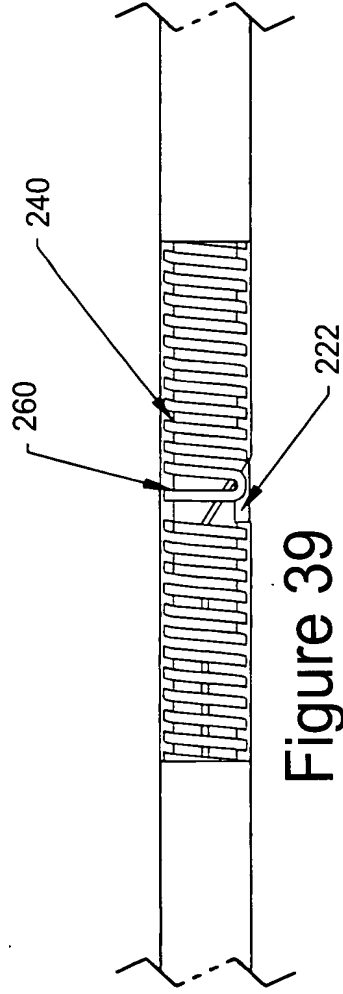


Figure 39

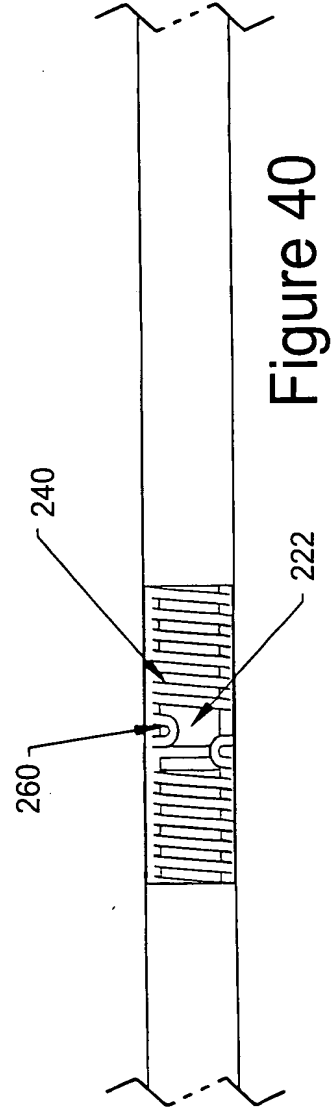


Figure 40